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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/754,355	01/05/2001	Kang-Yun Moon	0630-1213P	3314

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EXAMINER
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KOSTAK, VICTOR R

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 11/26/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/754,355

**Applicant(s)**

MOON, KANG-YUN

**Examiner**

Victor R. Kostak

**Art Unit**

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

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1. New claims 8-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gries in view of Lasky (Lasky cited in the last Office action).

The receiver of Gries (noting Fig. 1a) includes the feature of displaying the channel number (i.e. icon) of the next channel during the time a current channel is switched to another channel (col. 1 lines 7-14 and 16-21).

By not specifying the exact type of device he uses as channel changing unit 11, Gries thereby gives an implicit suggestion that any suitable channel-changing device can be used. In view of this, it would have been obvious to one of ordinary skill in the art to use any suitable unit that provides ready and convenient operational selectivity, such as that having an up/down key used by Lasky (noting device 35 in Fig. 5), who in a similar system, momentarily displays the channel icon of the channel just selected over the program of that channel (col. 6 lines 20-35), thereby meeting claims 8 and 12.

As for claims 9 and 13, Lasky also includes a database 52 locally accessed by controller 51 upon channel changing, for display of the channel hat or icon. It would have been obvious to store the in-between channel data of Gries (who discloses a character generator 25) locally for retrieval, for the benefit of accessing the data more readily since that data is to be displayed immediately upon recognizing a channel change, during the channel gaps of Gries.

Considering claims 10 and 14, the system would naturally carry out scanning of the storage for retrieval of the appropriate channel data.

As for claims 11 and 15, it would further have been obvious to incorporate the channel data display feature as modified by Lasky in any television format covering

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digital television, which he allows (e.g. col. 4 lines 47-54), for the benefit of providing all viewers with the enhanced feature of looking at actual imagery rather than noise or disruptive data during those times between channel changing.

2. Amended claims 1-4 are now rejected under 35 U.S.C. 103(a) as being unpatentable over Grossman et al. in view of Gries.

The television receiver of Grossman (noting particularly Figs. 2 and 3) “*can be any conventional cable television receivers signals well known to those skilled in the art*” (col. 3 lines 6-9), which therefore covers both analog and digitally formatted video, and the auxiliary display data can be either analog or digital signals (col. 6 lines 55-57). The system features displaying data between channel switching (e.g. col. 3 lines 46-55), which system includes tuner 72 for processing the incoming digital signal. Microprocessor (CPU) 60 accesses (searches) RAM 44 to determine which of stored data would be relevant to display during the time period gap between tuned channels (col. 6 line 66 – col. 7 line 8), which data is in turn shown on the screen of TV 30.

Since Grossman points out that the data to be displayed can be “*any information of any commercial value, such as a logo or trademark ...*” (col. 3 lines 35-37), it would therefore have been obvious to one of ordinary skill in the art to display the next channel number, logo or icon, because it serves as an advertisement for that next channel. Furthermore, since Gries in a related system explicitly teaches displaying the next channel number (icon) during the gap between channels, and since Grossman explicitly allows for any information of any commercial value, it would accordingly have been

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obvious to display such channel announcements in the system of Grossman, thereby meeting claim 1.

As for claim 2, the examiner takes Official notice that the processed signal is typically converted into analog form in order to be presentable on a typical analog display device. Such is suggested by the capability to store analog data (col. 6 lines 55-65). Grossman further gives broad allowance as he points out that *"television receiver 30 can be any information appliance including any conventional television receiver or visual display system capable of providing video output ..."* (col. 3 lines 13-15), which again covers accommodation for either digital or analog data.

As for claim 3, RAM 44 serves as the main memory for storing program and advertisement (i.e. channel ID data), which data is accessed (i.e. looked up) by Microprocessor 60 upon detection of channel changing (col. 7 lines 1-42, which also discusses alternative storage options). Grossman also includes a ROM 40 for storing control programming (col. 6 lines 15-17 and lines 33-40).

Regarding claim 4, it would have been obvious and a logical follow-up for the main memory to set a diagram or suitable imagery per designate channel for display of the imagery of each respective channel, particularly since Grossman arranges a graphics generator 68 in series between RAM 44 and the switch 76. It is further noted that a library of additional images can also be stored as associated with the display data, and in either memories 40 or 44, (col. 7 lines 38-41) the "library" serving as data in look-up form.

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3. Amended claims 5-7 are now rejected under 35 U.S.C. 103(a) as being unpatentable over Grossman in view of Gries and Lasky.

Consistent with the rest of his disclosure, Grossman also gives broad allowance for the remote controller 20, stating that "*remote control device 20 can be any conventional remote system for controlling television receivers ...*" (col. 3 lines 17-19).

In view of this explicit teaching, it would have been obvious to incorporate any suitable unit that provides ready and convenient operational selectivity, such as that having an up/down key used by Lasky (noting device 35 in Fig. 5), who in a similar system, momentarily displays the channel icon of the channel just selected over the program of that channel, as pointed out above.

Fig. 2 of Grossman shows the steps in displaying the in-between data upon detection (judgment) of a channel change (noting step 90) of the remote unit (block 82), wherein the tuning process carries out the typical step of receiving the channel upon selection of the next channel. The system then selects the appropriate display data for the period between channel changing (noting steps 94 and 110, and blocks 114 and 98). The system as modified by Gries would during these steps access the RAM or ROM for the respective channel number/icon/logo data for eventual display on TV 30, thereby meeting claim 5.

As for claim 6, any subsequent channel change would likewise cause the system to perform the steps of tuning to the newly selected channel prompted by remote 20.

As for claim 7, the system would naturally stop cycling through the entire range of channels and settle on a desired channel so determined by the viewer (noting also steps 90 and 122).

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4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tsuria also displays data during the time period between channel switching.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor R. Kostak whose telephone number is 703 305-4374. The examiner can normally be reached on Monday thru Friday from 6:30am to 4:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew I. Faile, can be reached at 703 305-4380. The fax phone number for the organization where this application or proceeding is assigned is 703 308-6306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305-3900.

Any response to this final action should be mailed to:

Box AF

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

or faxed to:

(703) 308-6306, (for formal communications; please mark "EXPEDITED PROCEDURE"; for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Victor R. Kostak  
Primary Examiner  
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